Department of Labor & Workforce Development

DEPOSITION OF HEARING

Taken September 19, 2018



615.221.1089

1	STATE OF TENNESSEE
2	DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
3	BOARD OF BOILER RULES
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7	QUARTERLY MEETING OF THE
8	STATE BOARD OF BOILER RULES
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10	September 19, 2018
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22	ELISABETH A. MILLER LORENZ, RMR, CRR, LCR# 66 STONE & GEORGE COURT REPORTING
23	2020 Fieldstone Parkway Suite 900 - PMB 234
24	Franklin, Tennessee 37069 615.221.1089
25	013.221.1009

		Daga 1		Page 4
1	APPEARANCES:	Page 2	1	Page 4 PROCEEDINGS
2	Brian R. Morelock, Chairman		2	CHAIRMAN MORELOCK: I'm going to call
	Owner-User Representative		-	this September Tennessee Board of Boiler Rules to
3 4	David W. Baughman, Board Member			-
4	Owner-User Representative		4	order. If you have an agenda, you can certainly
5			5	follow along with that. So with all that said, the
6	Dr. S. Keith Hargrove, Mechanical Engineer		6	first order of business we've called the meeting
l _	Representative		7	to order.
7 8	Harold Bowers, Insurance Representative		8	A couple things I want to say is, first
9	narota bowers, insurance Representative		9	off, I want to tell you how glad I am to see
	Terry Fox, Boilermaker Representative		10	Terry Fox with us today, so we're very pleased to
10			11	have him with us. Make sure you go by and shake
11	Sam Chapman, Chief Boiler Inspector		12	Terry's hand. It's just a remarkable story, so I'll
12	Jeffrey Henry, Board Member		13	leave that at that.
13	defile, henry, board member		14	I also want to thank Mr. Dave Baughman
14	Chris O'Guin, Boiler Inspector			
15				for chairing the August meeting that we rescheduled
1,	Kim Y. Jefferson, Esq.		16	from June. He did a fine job from what I
16 17	Administrator, State of Tennessee		17	understand, so I thank you for that, sir.
*	Dan Bailey, Esq.		18	Are there any other announcements that
18	Legal Counsel, State of Tennessee		19	people would like to make at this time?
19			20	Our next order of business will be
	Lynn Kirby		21	introductions and announcements, and we'll start
20	Board Secretary, State of Tennessee		22	with our reporter.
22			23	MS. LORENZ: I'm Elisabeth Lorenz. I'm
23				the court reporter.
24			25	-
25			45	MS. KIRBY: I'm Lynn Kirby. I'm the
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1	Sofix LLC.	1	
2	MR. MALONE: Tim Malone,	2	Hartford Steam Boiler.
3	Eastman Chemical.	3	MR. BOWMAN: Scott Bowman,
4	MR. MENZEL: Correy Menzel,	4	Hartford Steam Boiler, loss control inspector.
1 5	Eastman Chemical.	5	MR. RAINEY: Randy Rainey, Buckman.
6	MR. BABEL: Matt Babel,	6	MR. CONNER: Andrew Conner, ACTEMMx.
	Eastman Chemical.	7	MR. SMITH: Jesse Smith, state boiler
8	MR. SANDERS: Jeremiah Sanders,	8	inspector.
1		9	-
1	Eastman Chemical.	-	MS. BARNETT: Doris Barnett, state IT.
10	MS. SNYDER: Mary Snyder,	10	MR. O'BRIEN: Dan O'Brien,
1	Eastman Chemical.		East Tennessee State University.
12	MR. MCDAVID: Ed McDavid,	12	MR. ELROD: Todd Elrod, East Tennessee
13	Eastman Chemical.	13	State University.
14	MR. MCCOY: Allan McCoy, chief	14	MR. HUDGINS: Ernie Hudgins,
15	inspector at Eastman Chemical.	15	Engineering Services Group.
16	MR. RENFRO: David Renfro,	16	MS. BENNETT: Carlene Bennett, boiler
17	Eastman Chemical.	17	unit.
18	MR. HILLMAN: Randall Hillman,	18	MS. BAKER: Tiffany Baker, boiler unit.
19	Eastman Chemical.	19	CHAIRMAN MORELOCK: Okay. Who did I
20	MR. ESTEPP: Jeff Estepp,	20	miss?
21	Eastman Chemical.	21	MR. BAILEY: Two in the back just came
22	MR. ADKINS: Bill Adkins, manager of		in.
1	field services, Hartford Steam Boiler.	23	MS. DURM: Leanne Durm, legislative
24	MR. HOLT: Tim Holt, state boiler		liaison for the department.
1	inspector.	25	MS. RHONE: And I'm Deborah Rhone,
43	inspector.	23	MB. MONE: And I in Depotal Mone,
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Page 10 Page 12 1 do have one change to the agenda, and that would be I've got some other things I want to 2 Item 18-09. This is the unilever item, which was a 2 put out. 3 request for three vessels that were not built to 3 We have Michael Ryan at the national 4 ASME code to become Tennessee specials. This item 4 board taking the national board exam. We have --5 will be removed from the agenda per conversation 5 all the inspectors are working on their continuing 6 with the chief inspector, Sam Chapman, and review of 6 education for the commission for the end of the 7 the documentation. 7 year. All of these vessels are exempt per 8 We have one open position in 9 Tennessee Code Annotated 68-122-105, 9 West Tennessee, and we have had -- we kicked off our 10 Subparagraph (a), Subparagraph (5) that unfired 10 conference Monday, and so far we have had Marty Toth 11 pressure vessels having a volume of five cubic feet 11 that's given us some training, and Molson's Mobile 12 or less are exempt. So those vessels are exempt, so 12 Unit to perform training with. 13 this item will be removed from the agenda. 13 So far we have an exciting week going 14 14 on. We have a day and a half left of training. Are there any other changes or 15 additions or corrections to the agenda? 15 Chris O'Guin will give the boiler variance report, 16 All right. Hearing none, do I have a and that's the chief report. 17 motion to accept the agenda as modified? 17 CHAIRMAN MORELOCK: Any questions of 18 Mr. Chapman? Comments? 18 MR. FOX: I'll make a motion. 19 CHAIRMAN MORELOCK: I have a motion. 19 MR. BAUGHMAN: Mr. Chapman, that 69,715 20 Do I have a second? 20 vessels, that includes fired, unfired, all vessels? 21 MR. BOWERS: Second. 21 MR. CHAPMAN: All vessels, active 22 CHAIRMAN MORELOCK: Any other 22 vessels. 23 discussion? All in favor say aye. Opposed? 23 MR. FOX: Thank you. 24 Abstentions, not voting? 24 CHAIRMAN MORELOCK: Any other 25 We have an agenda. 25 questions? Page 13 Moving on to Item 3 -- I'm sorry, Mr. O'Guin, give your report. 1 2 Item 4, which is approval of the August 8, 2018, MR. O'GUIN: As of today, we have 117 3 meeting minutes. I do have an e-mail from the court 3 known variances in the state. 9 percent require a 4 reporter apologizing for not being able to publish 4 follow-up inspection. 46 percent are active. 5 those minutes prior to this meeting, so the board 5 5 percent require reinspection. And we have 6 has not had an opportunity to review those minutes. 6 38 percent that no longer require a variance. 7 So I would like to table approval of This quarter we completed one variance 8 these August minutes to the December quarterly 8 audit with one approved, which was 9 meeting of the Tennessee board, and we will add 9 American Greetings. 10 those to the approval process for the August as well 10 And Mr. Bowers asked last meeting what 11 as this September meeting in December. 11 the No. 54 -- the 46 percent was. That number is 12 Moving on to Item 5, chief boiler 12 how many active variances we have in the state. 13 inspector's report, so, Mr. Chapman, I'll turn it 13 That's all from that report. 14 over to you. CHAIRMAN MORELOCK: Any questions or 15 MR. CHAPMAN: Thank you. 15 comments for Mr. O'Guin? 16 Number of inspections: State 16 Okay. Thank you very much. 17 inspector, 2,919; insurance agent, 5,912; giving us 17 That will take us on to Item No. 7, 18 which is old business. So our item is 18-06 from 18 a total of 8,911 inspections. 19 Number delinquent, we have a total of 19 Sofix, which is located on 2800 Riverport Road in 20 69,715 total vessels. We have 1,700 -- excuse me, 20 Chattanooga, Tennessee. They're requesting a new 21 1,215 inspections that's delinquent for the state, variance for one vessel to operate under the 22 and 455 from the insured. That's giving us a total 22 requirements of Chapter 0800-03-03.08(11), which is

24

23 the boiler attendant rule.

25 item. One, I didn't mention this in the

So couple things before we start this

23 of 1,671 delinquent.

We have 27 code violations that was

25 found. There are 6 uncorrected at the moment.

24

Page 14 Page 16 1 announcements. If you have a cell phone, would you 1 registrations with numerous safety, environmental, 2 please put that on vibrate or silence out of respect 2 and health international organizations. 3 for the presenters and conversations. They've done a great job in maintaining Two, whether you're presenting an item 4 their safe boiler since it was put in place. They 5 or you have a question or a comment from the 5 have a Cleaver-Brooks. It's a 1991 fire tube 6 audience, you're certainly welcome to provide that, 6 boiler. It's a 300-horsepower with a MAWP of 7 but please state your name and your company so our 7 150 psi. Their operating pressures are between 90 8 and 115 psi. 8 reporter can properly capture that. And make sure 9 you speak to where she can hear you. 9 They also utilize the 10 If I can hear you, then I know she can 10 Fireye BurnerLogix System as their primary safety 11 control. If the variance is approved, their remote 11 hear you, so make sure that I can hear you. Gentlemen, with that, you go ahead and 12 station will be located in the gatehouse, which is 13 present your item. 13 approximately 550 feet from the boiler room. It will be manned 24/7 during the MR. TOTH: Good morning, Mr. Chairman, 14 14 15 members of the board. 15 operation of the boiler variance by qualified remote 16 MR. BAILEY: Mr. Chairman. 16 attendants that serve the position as security CHAIRMAN MORELOCK: Thank you. That's 17 guards. 17 18 the other item. Before we present an item, I need 18 CHAIRMAN MORELOCK: With that 19 to ask for conflicts of interest. 19 presentation, do I have a motion to discuss this 20 Does the board have a conflict of 20 it.em? 21 interest? 21 MR. BAUGHMAN: Motion to discuss. 22 MR. FOX: I will have one. 22 CHAIRMAN MORELOCK: Second? 23 CHAIRMAN MORELOCK: You will have one? 23 DR. HARGROVE: Second. 24 MR. FOX: Yes. 24 CHAIRMAN MORELOCK: I'm opening up the 25 CHAIRMAN MORELOCK: So you know that 25 floor for questions or comments for this request for Page 15 1 you will not vote? 1 a boiler variance. MR. FOX: I will not vote. MR. TOTH: And, Mr. Chairman, if I may MR. BAILEY: What is the conflict? 3 add, I'd like to introduce the other representatives 3 MR. FOX: I've done some work for them. 4 4 here with me today. MR. BAILEY: During the discussion, you 5 CHAIRMAN MORELOCK: Certainly. MR. TOTH: To my left, I have 6 can take part in the discussion so long as it 6 7 doesn't relate to the conflict, but you cannot take 7 Mr. Anthony Paolucci, he is the plant manager; 8 part in the vote. 8 Mr. Sean Reynolds, who is the EHS manager; seated 9 MR. FOX: Exactly. behind us is Mr. Anthony Frady, who is the service 10 CHAIRMAN MORELOCK: With that said, 10 technician manager, to answer any additional 11 proceed. 11 questions that you may have. 12 MR. TOTH: Thank you, Mr. Chairman, 12 CHAIRMAN MORELOCK: Very good. 13 members of the board. It's a pleasure to sit on 13 What questions do you have? 14 this side of the desk in front of this distinguished 14 MR. FOX: You stated that at the remote 15 group. 15 station, at the shutoff station, that's manned by 16 My name is Marty Toth. I am with 16 security guards? 17 ECS Consulting and the Boisco Training Group. I'm 17 MR. TOTH: Qualified, yes. 18 here today to represent Sofix LLC for their 18 MR. FOX: What makes them qualified? 19 variance. 19 ${\tt MR.}$ TOTH: They will be going through Just a little bit of background 20 training as a remote attendant of the 21 information for you. Sofix started operations in responsibilities for the remote attendant that are 22 the Chattanooga area in 1992. At that time, they 22 listed under Section 3 of the manual and -- to 23 were issued a remote variance from this very board. 23 that -- to that end. Since that time, Sofix has taken great 24 MR. FOX: They are actually employees 25 of the company, or are they --25 strides in getting qualified and representations and

Page 20

Page 18 MR. TOTH: They are a third party, and MR. HENRY: But their actions are an 2 I'll let Mr. Paolucci add in if he has any 2 integral part of this overall safety program, so I 3 additional information. Honestly, I believe 3 just want to make sure from a legal standpoint that 4 Mr. Reynolds, that falls under his responsibility 4 Sofix is accepting responsibility for their actions. MR. PAOLUCCI: Yes. 5 for safety. 5 But with that, they are a third-party 6 MR. TOTH: If I may add, Mr. Henry, 7 company that is trained under the Sofix remote 7 this goes -- you see this a lot in boiler variances 8 attendant training policies. 8 where, yes, the owner-user takes ultimate THE WITNESS: They do have an assigned 9 responsibility for their actions, absolutely. MR. HENRY: Thank you. 10 post at Sofix, so we have the same security guards 10 11 every shift. 11 MR. TOTH: Mr. Chairman, if I may add, 12 MR. FOX: All right. 12 you will probably see, when you read through the 13 MR. TOTH: And they're also -- just to manual, that there are situations during 14 add on to that to comfort the board, there is a 14 nonproductivity time or nonproduction time where the 15 process that will be put into place for not only 15 remote attendant will shift roles from being remote 16 initial training of these individuals but continual 16 attendant to what we title as the boiler guard. And 17 training on an annual basis. Also for any turnover, 17 the boiler guard has additional training above and 18 there is a process put into place for training for 18 beyond the remote attendant training. Those 19 those security guard individuals. 19 individuals will have to be qualified as a boiler 20 attendant. 20 You will not be able to man that post 21 if you are not certified as a remote attendant 21 In the glossary of terms, you'll see 22 through Sofix policies. 22 the boiler attendant. For Sofix, there's a pretty 23 MR. BOWERS: So that's in their 23 good laundry list of individuals. That's where I 24 mentioned in my opening remarks that Sofix takes 24 official job description? It's an outside 25 contractor, correct? Page 19 1 MR. TOTH: Yes.

MR. BOWERS: That's in their official 3 job description that they'll be doing this boiler 4 stuff? MR. TOTH: You will find that 6 information under Appendix G of the manual for the 7 security guards. MR. HENRY: Since they are third party, 9 is Sofix accepting responsibility for all their 10 actions with regard to their duties? 11 MR. TOTH: I would let Mr. Paolucci 12 answer. 13 MR. PAOLUCCI: For their duties 14 assigned, yes. Their basic role is as remote 15 attendant. They are to acknowledge any alarm. And 16 then they have a set -- a list of instructions to 17 follow if they do get an alarm. 18 And basically that would be they've got 19 an emergency call list. They're not actually going 20 to be doing any troubleshooting on the boiler. 21 Their job is to call the person or the next person 22 on the list until they reach someone who can come 23 out who's qualified to troubleshoot the problem. 24 MR. TOTH: If I may -- go ahead, 25 Mr. Henry.

25 safety extremely seriously and feel that it is 1 necessary for them to have multiple individuals 2 qualified as a boiler attendant. Therefore, when the remote attendant 4 leaves the gatehouse, now the system -- the boiler 5 remote variance ceases to exist, and that individual 6 becomes a boiler attendant. The responsibility is 7 to do their rounds. Their rounds consist of them 8 visiting the boiler room, taking the readings at the 9 boiler room, returning to the gatehouse. MR. BAUGHMAN: Mr. Toth, who is at the 10 11 gatehouse while they are making their rounds? 12 MR. TOTH: There is no one at the 13 gatehouse. And that's where, once they leave that 14 gatehouse, the remote variance then becomes void 15 until they return to the gatehouse. 16 So during that time -- if I may add, 17 during that time, they have monitored that boiler. They have went to the boiler room and then returned. 19 There will be no time that that individual will be 20 away from the remote station longer than 20 minutes. 21 MR. BAUGHMAN: So in this facility, it 22 says they have areas both inside and outside the 23 property that they patrol, and they can accomplish 24 that and check the boiler within a 20-minute period

25 of time is what you're saying?

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Page 22
                MR. TOTH: I will let Mr. Reynolds kind
 2 of allude to the responsibilities for the security
 3 quard's rounds.
                MR. REYNOLDS: Yeah, they have rounds.
 5 They walk through the warehouse, walk through the
 6 plant, into the boiler rooms. That can all be
 7 accomplished in less than 20 minutes.
                I do it myself quite often as you can
 9 tell. I'm rather chubby and kind of out of shape,
10 and I can make the rounds in about 10 to 12 minutes.
11
                MR. BAUGHMAN: So playing devil's
12 advocate, while they're making their rounds and
13 there is an emergency elsewhere in the facility, who
14 mans that gatehouse? Who mans the station?
                MR. REYNOLDS: Could you clarify what
16 type of emergency?
17
                MR. BAUGHMAN: Make one up, fire,
18 medical, what have you, that requires security.
19
                MR. REYNOLDS: Fire, medical, they're
20 probably going to be heading back to that gatehouse
21 that is requiring outside intervention, like calling
22 911, that would be done from that gatehouse that
23 operates the gate if there's an emergency. They're
24 not going to stay and fight a fire or anything like
25 that. They don't have that responsibility.
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Page 24 1 leave their responsibilities as an attendant more 2 than the 20-minute period. So once they leave that guard house, 4 okay -- or gatehouse, then within that time frame, 5 as long as they do not surpass the 20-minute 6 requirement, they're within the allowances of the 8 MR. BOWERS: Question, now, this --9 since the security guard is 24/7, is the plant run 10 24/7? 11 MR. TOTH: No, it does not. The plant 12 runs productivity from -- they have a day shift that starts at 7 o'clock, ends at 5:30; then they have a 14 night shift that starts at 9 o'clock and ends at 15 7:30. So they actually have an overlap between the 16 night shift where we have the Sofix employee boiler attendants on premises and the ones coming. So there is a period between 5:30 and 19 9 o'clock where the security guard is required to be 20 a boiler attendant qualified individual. 21 MR. BOWERS: There's no time where the 22 security guard is the only person at that plant? 23 MR. TOTH: And I'll go ahead and allude 24 to Mr. Reynolds.

MR. BAUGHMAN: Well, I just know under 2 the security quard job description it says, Maintain 3 station at gatehouse remote station unless an 4 emergency requires abandonment of the station. So the word "probably" comes into play 6 instead of "they shall," and it does say that 7 there's the possibility of an emergency that would 8 require an abandonment of the station, which means 9 there's an abandonment of the attendant of the 10 boiler --11 MR. REYNOLDS: If that emergency did 12 arise where they had to leave the station, first 13 thing they'll do is pull the E-stop, shut the boiler 14 down. It's pretty simple as far as leaving that if 15 they have to leave the site. You can kill the 16 boiler --MR. BAUGHMAN: Is that in your manual 18 to identify that particular process of if you have 19 to leave for an emergency, somebody has to activate 20 the E-stop? 21 MR. REYNOLDS: I don't believe it's 22 actively stated in there. We can add it. MR. TOTH: And if I may add, 24 Mr. Baughman, that issue only comes into play if

25 whatever causes them to leave the guard house or

1 times when the security guards are the only people 2 at the plant. MR. BOWERS: One security guard? 4 MR. REYNOLDS: One security guard. 5 MR. BOWERS: For the whole plant? 6 MR. REYNOLDS: Yes. 7 MR. BOWERS: Is the boiler operating 8 during that time period? 9 MR. REYNOLDS: Yes, sir, it is. MR. TOTH: And that's where --10 11 Mr. Bowers, that's where we get to the point of the 12 remote attendant that's at the gatehouse turning 13 into a boiler attendant during the rounds. DR. HARGROVE: Question, as the plant 15 manager, how -- how do you provide, I guess, 16 oversight, monitored control with regard to security 17 access protocol to the control system with regard to passwords, anything of that such based on the schedule that was just described? 20 MR. PAOLUCCI: Well, there's -- the 21 security guard mans the gate. The gate stays 22 locked. 23 As far as access to the boiler room, is

24 that what you mean? There's no particular password

MR. REYNOLDS: Yes, sir, there are

25 responsibility.

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Page 26
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                MR. TOTH: If I may add to that,
                                                                         MR. TOTH: We could have an act of God.
                                                          1
 2 Mr. Hargrove, and Mr. Frady could back me up on
                                                          2
                                                                         CHAIRMAN MORELOCK: I agree.
 3 this.
                                                          3
                                                                         MR. REYNOLDS: If I may, their
                The particular controls they have, the
                                                          4 supervisors control and check in with the guards on
 5 Fireye BurnerLogix controls have password
                                                          5 the off-shift hours. There's a couple times in the
 6 protections for settings if that's what you were
                                                          6 off shift where somebody's supervisor checks in and
 7 alluding to.
                                                          7
                                                            makes sure everything is all right.
                                                          8
                                                                         CHAIRMAN MORELOCK: They're on site,
 8
                DR. HARGROVE: Yes.
9
                MR. TOTH: And those --
                                                         9 right? Or are they off-site?
                DR. HARGROVE: Who are they,
10
                                                         10
                                                                         MR. REYNOLDS: They come on site.
11 individuals that have access to that?
                                                         11
                                                                         CHAIRMAN MORELOCK: They come on site.
12
                MR. TOTH: I will ask Mr. Frady.
                                                         12
                                                                         MR. REYNOLDS: They come on site, check
13
                MR. FRADY: Yes, we have a password
                                                         13 in with the guards for a 20-, 30-minute meeting.
14 list that's available for the managers' purposes.
                                                         14 They're checking in with their people.
15 There's three different passwords: One that you can
                                                                         CHAIRMAN MORELOCK: If need be, could
                                                        15
16 enter in and kind of look around, but there's one
                                                         16 they come in and serve that role as remote monitor
17 password that we have that you can actually go in
                                                         17
                                                            and even boiler guard if need be?
18 and make changes. But if any changes are made, it's
                                                        18
                                                                         MR. REYNOLDS: Not without training,
19 usually our service techs from our boiler company
                                                         19 no. If push came to shove, one of two things is
20 that does the maintenance.
                                                         20 going to happen. One of us is going to get up and
                So the security guards have no access
                                                         21 go serve as the remote attendant or just shut the
22 to them codes.
                                                         22 boiler down.
23
                                                         23
                                                                         CHAIRMAN MORELOCK: That's where your
                DR. HARGROVE: Okay.
                CHAIRMAN MORELOCK: So during normal
                                                         24 call list comes into play?
25 production, do you have more than one security guard
                                                        25
                                                                         MR. REYNOLDS: Yes.
                                              Page 27
                                                                                                       Page 29
 1 on site?
                                                                         CHAIRMAN MORELOCK: So you could train
                                                          1
                MR. REYNOLDS: We do. During our day
                                                          2 that boiler quard to use the call list if they had a
 3 shift, we have one that his sole duty is to take the
                                                         3 situation where they need to call you in?
 4 reading every 20 minutes.
                                                          4
                                                                         MR. TOTH: If I can add to that,
                CHAIRMAN MORELOCK: So you do have
                                                          5 Mr. Chairman, absolutely. Though the boiler guards
                                                          6 are trained in the same training that the Sofix
 6 continuously manned remote station, and you have an
 7 on -- stop boiler attendant during production?
                                                          7 employees are trained, the individuals that report
                MR. REYNOLDS: During day shift
                                                          8 directly to Mr. Frady, those boiler quards are
 9 production. At night, the remote attendant is
                                                          9 instructed, as you can see, through the emergency
10 taking the boiler reading every 20 minutes. We're
                                                         10 procedures list. Their responsibility upon alarm is
11 operating under every 20 minutes, so that person is
                                                         11 to trip the boiler, okay, acknowledge the alarm.
12 at the boiler every 20 minutes.
                                                         12 Then they are to go to the boiler room to see that
13
                CHAIRMAN MORELOCK: So to honor
                                                         13 there are no extenuating circumstances, that the
14 Dr. Canonico, what if your guard on the
                                                         14 boiler has indeed shut down.
15 nonproductive night shift has a heart attack, has a
                                                         15
                                                                         In that process, though, they have made
16 health issue, has a stomach virus, are you going to
                                                         16 communication through their emergency list. They
17 rely on the boiler software to shut down the boiler
                                                         17 are not going to restart that boiler even though
18 if there's a problem? That's what it sounds like to
                                                         18
                                                            they have been through the boiler attendance class.
19 me.
                                                         19
                                                                         Mr. Henry, kind of going towards your
                MR. TOTH: I'll be honest with you,
                                                         20 position on liability, Sofix has chosen to take the
21 Mr. Chairman, the issue that comes up in that case
                                                         21 position that they would prefer to have Sofix
22 is not really something that I would believe that
                                                         22 employees restart the boiler versus having the
23 this body would have control over because now we're
                                                         23 boiler guard, though they have been trained.
24 talking about employment individuals.
                                                         24
                                                                         MR. BOWERS: Question is, you've got a
25
                CHAIRMAN MORELOCK: I agree.
                                                         25 person at 1 o'clock in the morning or whatever,
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Page 30 Page 32 1 change that protocol should the variance get 1 between shifts has to shut the boiler down, what 2 does that do to -- say the boiler has to be down for 2 approved to how often? 3 an hour while they get a handle on the situation, MR. REYNOLDS: Well, as far as making 4 what does that do to your production? 4 the rounds? MR. PAOLUCCI: It really depends on 5 MR. BAUGHMAN: No, just on checking the 6 timing. If the boiler has to be down, there's only 6 boiler. 7 one process that requires steam at a certain time. MR. REYNOLDS: That's actually going to 8 We can work around that if we need to. We can stop 8 be assigned every 2 hours to the guard, so there's 9 that process temporarily and resume it once the 9 not -- if they miss a time, we're not going past the 10 boiler is back up. 10 4-hour regulation, and we were capturing every 11 11 2 hours. It may be 2-1/2 hours between readings, It does create somewhat of an 12 inconvenience to production, but we can work around 12 but it's going to be multiple readings. 13 it. MR. BAUGHMAN: That will be for the 14 MR. BOWERS: Say it had to go down for 14 night shift also? 15 an hour. He's not feeling well. I'm shutting the 15 MR. REYNOLDS: Around the clock, yes, 16 boiler down. I'm going to start calling people. 16 sir. How does that affect the plant at, say, 17 MR. TOTH: Mr. Baughman, if you'll 18 3 o'clock in the morning? 18 notice, on Appendix F of the manual, it's your log, 19 MR. PAOLUCCI: It would definitely 19 your boiler log. The boiler log actually is a 20 create delays in production. 20 24-hour log just for that very purpose if we have MR. TOTH: If I may add to that, 21 additional readings. 22 Mr. Bowers, I know you're using an example of 22 MR. BAUGHMAN: Looking at the site plan 23 1 o'clock in the morning, 3 o'clock in the morning. 23 going from the gatehouse not knowing where they Let's remember that the productivity 24 patrol, but under job duties, it says they patrol 25 times, production times for this company, the 25 inside and outside the property. Page 33 1 mispoint of having actual employees on site for MR. PAOLUCCI: Not the property. 1 2 Sofix is only from 5:30 to 9:00 p.m. The rest of 2 Within the buildings of the property. MR. BAUGHMAN: It doesn't say that 3 the time there are numerous operators that are --4 that will be trained and qualified as a boiler 4 under job description, so that's why I mention it. 5 attendant that will be on site. So it's both inside -- rephrase that So just to kind of add that into the 6 again so I can rewrite it, because in here it says 7 conversation. 7 both inside and outside the property. Again, as I alluded to, Sofix is strong 8 MR. PAOLUCCI: It's inside and outside 9 on their safety, very strong. I was very impressed 9 the buildings within the property. 10 during my tour of the facility, during my site MR. BAUGHMAN: Inside and outside the 10 11 visit. They stress safety. That's why I have an 11 buildings within the property. 12 individual here that that's his sole responsibility 12 MR. REYNOLDS: They're not going to be 13 there at the plant. 13 walking off the grassy areas. So they're going to dump process to MR. BAUGHMAN: That's why I needed a 15 make sure that they're safe. 15 clarification because it --MR. BAUGHMAN: You had mentioned MR. PAOLUCCI: That's very good. 16 17 earlier, how often does the day shift check the 17 That's good. We can change that. It's the 18 boiler? 18 interpretation of it, and I agree with your 19 MR. REYNOLDS: Currently on day shift, 19 interpretation that it could be confusing. 20 we're checking it every 20 minutes. In fact, we're 20 MR. BAUGHMAN: Very good. 21 doing the 20-minute checks 24 hours a day right now. 21 Back to what Mr. Hargrove was speaking 22 During the day shift, we have one extra security 22 on earlier on the technical end of it with the 23 quard on site because we have traffic coming in and 23 passwords, do we have remote availability to be able

24 to log in to see what the controller is doing or

25 what the boiler is doing?

24 out of the front gate, which --

MR. BAUGHMAN: And you're going to

25

Page 36 Page 34 MR. FRADY: Yes. 1 questions? 2 MR. BAUGHMAN: And how is that 2 MR. HENRY: Just one follow-up on 3 accomplished? 3 Mr. Fox's point he made earlier. MR. FRADY: It's a factory link that we You had indicated in the circumstance 5 where the remote station had to be evacuated for 5 have regardless of the -- the managers can -- even 6 at home, we can get into the system and actually see 6 whatever reason, you said the boiler could be shut 7 readings of the boiler. 7 down automatically, but yet you said it's not in MR. FOX: Can you make changes from 8 your procedures. 9 your house? 9 MR. REYNOLDS: Well, as far as -- it 10 can't be reset automatically. It's just if you have 10 MR. FRADY: No. 11 MR. PAOLUCCI: We can see actual boiler 11 to evacuate the station, if you had to evacuate the 12 readings like steam pressure, but we cannot see the 12 remote station for some reason, we have a lot more 13 control settings or anything. 13 to worry about than the boiler. They can pull the MR. BAUGHMAN: Earlier he said one 14 14 E-stop, and it shuts down the boiler. It can't be 15 person could make changes is what he stated. 15 restarted from the remote station, and the boiler is 16 MR. FRADY: Well, the service techs in 16 down at that point. 17 boiler mechanical, they have the codes. If they get 17 MR. HENRY: That makes perfect sense. 18 called in, they're the ones that make changes. They 18 I guess what bothers me, if I understood your 19 have access -- they know the codes. 19 answer -- or maybe I misunderstood it, it's not in $\ensuremath{\mathsf{MR}}\xspace$. BAUGHMAN: Can these changes be 20 20 your procedures right now. 21 remotely looked at or accomplished? 21 MR. REYNOLDS: It may not be written 22 MR. FRADY: No. 22 the way the question was asked. It's something that 23 MR. BAUGHMAN: And how is the 23 I can easily add to the procedure right at this 24 communication actually done since you can do this 24 point of the training as far as the training if we 25 from home? Is this done via web, Internet 25 have to evacuate the station. Page 35 1 connections, so forth? MR. TOTH: Mr. Henry, if I could add to 1 MR. FRADY: Yes. 2 that, again, as I alluded to, it has everything to MR. TOTH: Mr. Baughman, they actually 3 do with timing. 4 have -- which is not in -- stated in here because 4 MR. HENRY: I understand if it's less 5 it's not necessary for their boiler controls. 5 than 20 minutes it's not applicable. But it could 6 But they do have the NEXUS system for 6 be more than 20 minutes. 7 integrated controls. That's for more of the MR. TOTH: Well, and at that time, 8 in-depth operating controls, as you know, not 8 then -- if there is -- there are procedures in place 9 necessarily for safety controls. 9 for emergency procedures that Sofix does have in the MR. BAUGHMAN: On the reset, should we 10 case of an emergency that they -- that are outside 11 have a lockout of anything within the gatehouse 11 of this variance that cover situations such as that. 12 itself, and is anything able to be reset off of a 12 MR. HENRY: So there are procedures 13 screen? 13 then? MR. FRADY: (Nonverbal response.) MR. TOTH: There are procedures outside 15 MR. BAUGHMAN: It's all a hard reset? 15 of the boiler variance. 16 MR. FRADY: Yes. You basically have to MR. REYNOLDS: We have a very detailed 16 17 be there. 17 emergency action plan which pretty much covers 18 MR. BAUGHMAN: I'm sorry? anything you can think of, fire, explosions, storms, 19 MR. FRADY: Visually you have to -anything that comes along of what to do. MR. BAILEY: Excuse me. When he asks If we have to evacuate the facility, 21 you a question like that, we need a verbal response 21 then everything is going to be shut down. Again, 22 for the transcript. You were shaking your head no. 22 any of those issues, it's kind of looking for the MR. FRADY: Okay. 23 unintended or the unthought of, we have looked at 24 MR. BAILEY: We actually need a no. 24 the risks and what we need to do. 25 25 MR. BAUGHMAN: So -- and not to beat CHAIRMAN MORELOCK: Any other

Page 40 Page 38 1 the security guy up to any great extent. 1 person is not present. But how long is the night shift in 2 MR. BAUGHMAN: Okay. 2 3 particular? 3 MR. REYNOLDS: More to your point, if MR. TOTH: The night shift runs from 4 he's taking extra time, if his rounds, for example, 5 9:00 p.m. to 7:30 a.m., and that has Sofix employees 5 would take 38 minutes, we would expect to see two 6 qualified boiler attendants on site at that time. 6 readings within a 40-minute time frame. So if he's So the security guard, i.e., the remote 7 gone for 35, 38, 41 minutes, there's going to be two 8 attendant does not have to serve that role because 8 readings taken. That's going to be part of the 9 there are individuals on site that work for Sofix. 9 training, part of the process, and part of what MR. BAUGHMAN: But not so much in the 10 10 we're going to... 11 11 gatehouse. MR. BAUGHMAN: Does he log when he 12 MR. TOTH: What about the gatehouse? 12 leaves the gatehouse and when he returns to the 13 MR. BAUGHMAN: Well, the security --13 gatehouse? 14 he's the guy that's --14 MR. REYNOLDS: That's what we're going 15 MR. TOTH: He's the remote attendant. 15 to have him do, yes. 16 MR. BAUGHMAN: That's what I'm saying. 16 MR. BAUGHMAN: So that's not being done 17 presently, but it's what he will do. So regardless if others are on site, 17 18 they're not acting as remote attendants at that MR. REYNOLDS: Presently we have 18 19 time, so that doesn't --19 readings being taken every 20 minutes, so there's a 20 MR. TOTH: Well, as I mentioned, 20 record of that, what we're doing now. 21 Mr. Baughman, the gatehouse while the variance is in What we're doing now is we're operating 22 effect is manned 24/7. 22 under the 20-minute rule. We have somebody looking 23 MR. BAUGHMAN: So he makes his rounds 23 at the boiler every 20 minutes, taking a reading. 24 every two hours. He leaves the guard shack, walks When the variance is in effect, we have 25 inside and outside or within the buildings. He may 25 our 24-hour log, which is changed from the log that 1 we're currently using to account for that. Yes, we 1 or may not take a smoke. MR. REYNOLDS: If he takes a smoke on 2 will instruct him, If you leave the guardhouse, you 3 the property -- we have no smoking on the property. 3 need to sign out and sign back in when you return. MR. BAUGHMAN: No smoking on the 4 MR. BAUGHMAN: What I would like is to 4 5 property. But he has to relieve himself or take 5 have a check and balance so that when the boiler 6 care of his personal business, which then gets past 6 variance inspection is done he can look at the time 7 the 20 minutes. 7 of leaving the guard shack, return to the guard What I'm getting at is anytime that 8 shack, comparing it to his readings in the boiler 9 attendant is gone for more than 20 minutes of how 9 room to make sure that everything matches up. 10 that's attended to within the --10 MR. REYNOLDS: I don't know if it helps MR. REYNOLDS: How what's attended to, 11 11 for this or not. We have a camera set up aiming 12 Mr. Baughman? 12 towards where -- if somebody is present, there's a 13 MR. BAUGHMAN: Well, how the procedure 13 camera. During the off shifts, somebody walks in, 14 is attended to during this period of time that the 14 that's how we're ensuring they're doing their 15 boiler is not being looked at under the variance; in 15 20-minute rounds currently. 16 other words, the guard station is now vacant, he's 16 But that's also going to be a time 17 making his rounds, he has to take a little extra 17 check. If I needed to audit the system and I see 18 time for other business -something for 11:50 on Friday night, I can go back 19 MR. TOTH: If I can add -- interject, 19 to the security footage from that and see if he 20 the remote attendant -- the rounds that the remote 20 wasn't in there at 11:50 on Friday night. MR. BAUGHMAN: Will that be available 21 attendant makes are between the hours of 5:30 and 21 22 9:00 p.m. 22 to the boiler variance inspector? 23 MR. PAOLUCCI: Or on the weekends. 23 MR. REYNOLDS: We currently have those 24 MR. TOTH: Or on the weekends. 24 video feeds stored on the cloud for seven days. 25 25 That's part of what we've got now. MR. PAOLUCCI: Basically when a Sofix

Page 44 Page 42 MR. BAUGHMAN: You see what I'm getting 1 other one? 2 at, there just needs to be a check and balance of, 2 CHAIRMAN MORELOCK: Sure. Go ahead. 3 This is what I'm saying, but they need to verify 3 MR. TOTH: This is simply the advances 4 that's actually what's happening. 4 of technology. You've got to love it, love Word. MR. REYNOLDS: I can have an example of 5 As you'll notice in Section 3, there 6 that type of audit and download the video feeds time 6 was obviously an inadvertent enter stroke that 7 stamped, and I can have that available, here is an 7 renumbered from remote attendant, as you can see, 8 example of what that process is. 8 and then it jumps down to 2. Therefore, it probably MR. TOTH: Again, as Mr. Reynolds 9 did not match up -- well, not probably, it 10 alluded to, the quardhouse -- the gatehouse will 10 definitely did not match up with the checklist. I 11 have a log present for showing when they have left will take full and absolute responsibility for that. 12 the gatehouse. Hopefully it became pretty clear as you 13 MR. BAUGHMAN: That log will be timed 13 reviewed that that 1 was actually 2, 2 is actually 3 14 and -- off the checklist. So I do apologize for 14 or just a check? MR. TOTH: Hopefully it will be timed. 15 that. That will be corrected. 15 16 Will it be timed? That's not part of the boiler 16 CHAIRMAN MORELOCK: No problem. 17 variance, so, therefore, I'm not privy to that. 17 In Appendix G, the job descriptions are 18 MR. REYNOLDS: Well, whatever works for 18 fine. One of the things that -- for the variance, 19 us to satisfy the boiler inspector and our procedure 19 we want to clearly see that their various duties 20 as far as we have to put the exact time on there, 20 related to the boiler are so noted, and they are. 21 that's what we'll do. 21 You've got a really good statement. In MR. BAUGHMAN: You know, I think since 22 some of these, it says, Qualified as a Sofix LLC 23 we're talking about times -- now I may be off in 23 boiler attendant in case of emergency shutdown or 24 left field -- but a check mark doesn't exactly give 24 manpower shortage solutions. I don't know that 25 us enough accountability for the liability. 25 that's consistently used. Page 43 1 MR. REYNOLDS: Right. 1 MR. TOTH: And it's not, Mr. Chairman. MR. BAUGHMAN: And since we're looking 2 That was purposefully done. 3 at making sure this is done within the time frame CHAIRMAN MORELOCK: Intentional? 4 that's required by what our variance identifies that MR. TOTH: Intentional. 4 5 we need to have that check and balance, even though 5 CHAIRMAN MORELOCK: So the other part 6 would be -- I think in some of the job descriptions 6 logging the time isn't exactly what's part of our 7 variance, we need to have that accountability for 7 you also have another good statement that says, 8 the inspector. 8 Additional responsibilities as listed on the MR. REYNOLDS: We also have what's training record, i.e. -- or, e.g., boiler attendant, 10 called -- they have what's called a pipe click. 10 boiler guard. You might want to make sure those are 11 There's certain stations around the facility where consistent in Appendix G. 12 they have the little wand, and they activate it. 12 Are there any other questions, 13 That's something we could work into a procedure, 13 comments? Hearing none, do I have a motion for this 14 when you leave the guardhouse, do your pipe click. item? 15 When you return, do your pipe click. Then we'll 15 MR. HENRY: So moved. 16 have an electronic record of the comings and goings CHAIRMAN MORELOCK: So the motion would 16 17 of the station house there. 17 be, contingent approval of the boiler variance based 18 CHAIRMAN MORELOCK: Other questions? I upon a successful site visit by the chief inspector, 19 just have a couple editorial while we're talking deputy inspector from the state of Tennessee. So 20 about shifts. 20 that's what we're voting on. 21 On Page 43 under your glossary of terms 21 So I have a motion. 22 for definition of shift, you have there are three 22 Do I have a second? 23 and then a parenthetical --23 MR. BAUGHMAN: Well, I would also make 24 MR. TOTH: Yes, that's one. 24 the corrections to our placard inasmuch as we've 25 Would you like for me to point out the 25 talked about changing the procedure, that procedure

Page 48 Page 46 1 of if they have to leave is not -- and your placard. MR. BAUGHMAN: Second. 1 Even though you've got other 2 CHAIRMAN MORELOCK: I have a second. 3 procedures, being that we are making this part of 3 Any more discussion? 4 the remote variance procedure, there was nothing in All right. Hearing none, I'm going to 5 call the question, all in favor say aye. 5 there as far as leaving for more than that 20-minute 6 of disabling the boiler. 6 In Unison: Aye. CHAIRMAN MORELOCK: But that wouldn't 7 CHAIRMAN MORELOCK: Opposed? 8 Abstentions? 8 be part of the placard for the variance; that would 9 be part of the 20-minute rule, correct? 9 MR. FOX: One. MR. TOTH: Yes. CHAIRMAN MORELOCK: One abstention 10 10 11 CHAIRMAN MORELOCK: Does that make 11 noted, not voting. 12 sense? We're approving a variance to the 20-minute Gentlemen, you have a contingently 13 rule. 13 approved variance based on a successful site 14 MR. BAUGHMAN: Well, that 20-minute inspection and updating your manual per the comments 15 rule describes the emergency procedures placard. from the Tennessee board. 16 CHAIRMAN MORELOCK: For the boiler 16 MR. TOTH: Thank you very much. 17 17 attendant rule. MR. REYNOLDS: Thank you. 18 But when they step out of that quard 18 CHAIRMAN MORELOCK: That completes 19 shack, they're not under the variance anymore. 19 Item 18-06. That concludes our old business. 20 We're back to the 20-minute rule. 20 Moving on to Item 8, which is new 21 MR. TOTH: Back to it. 21 business, our item is 18-08, East Tennessee State 22 MR. BAUGHMAN: Okay. University is requesting a variance for four vessels 23 CHAIRMAN MORELOCK: So it needs to be to operate under the requirements of 24 in your procedures for the training or whatever. 0800-03-03.08(11), which is the 20-minute rule. 24 MR. BAUGHMAN: Yes. 25 Gentlemen, if you will come forward, CHAIRMAN MORELOCK: But it doesn't 1 introduce yourself, and present your request for 2 apply to this particular variance. 2 variance. Does that make sense? MR. HUDGINS: I'm Ernest Hudgins with 4 MR. BAUGHMAN: It does. 4 Engineering Services Group. Beside me is MR. TOTH: I will assure you, I will be 5 Dan O'Brien, who is the director with the facilities 6 working diligently with Sofix in creating their 6 at East Tennessee State University. Todd Elrod is 7 on-site boiler attendant and the remote attendant 7 the manager. 8 training. That will be brought up. We will bring 8 I'd just like to thank Mr. Chapman and 9 in that procedure that's outside of the variance. 9 the board for entertaining this request for a 10 We'll bring that into the training for the remote 10 variance. 11 attendant and also for the boiler attendant, because East Tennessee State University, ETSU, 12 that individual will serve both those roles in that 12 is a large university located in Johnson City, 13 situation. 13 Tennessee. It's part of the Tennessee Board of MR. BAILEY: Mr. Chairman, does the 14 Regents. Currently they operate four high pressure 15 motion also -- it's contingent upon follow-up 15 boilers ranging in size from 500 horsepower to 16 inspection but also changes to the manual that were 16 1500 horsepower. 17 pointed out? 17 Starting back in the '90s, 1999, they 18 CHAIRMAN MORELOCK: Yes, that's made a push to convert from coal to natural gas. 19 correct, Mr. Bailey. That conversion was completed last year with the And it is contingent on also making addition of a 1500-horsepower fire-tube boiler and a 21 changes to the manual based on the comments from the 21 500-horsepower fire-tube boiler. 22 Tennessee board meeting. 22 All four boilers are microprocessor So thank you for that addition. So 23 based. One has Coen controls on it. One is Fireye. 24 that is the motion. 24 The other two are Honeywell as stated in the list. 25 25 The boilers provide the space heating, Do I have a second for this motion?

Page 50 Page 52 1 hot water to the campus. They operate 24/7, roughly 1 It is a dynamic, self-checking system. It is also 2 365 days a year. There's probably a 1-week period 2 password protected. 3 where the boiler plant is taken down for It also allows the operators, managers 4 maintenance. 4 to -- since it's web based, to look at the boilers All the relief valves on the boilers as 5 from a remote location themselves. But as far as 6 part of the last edition were replaced and set to 6 making any changes to operating parameters, it's --7 130. So there's 130 psi. So all the boilers have it's -- they're not allowed to do that. The boiler attendants are all boiler 8 the same relief valve settings. 8 All the boilers have been inspected and operators. The service -- years of service range 9 10 from 5 years to 35 years. So these people have 10 approved by the state local boiler inspector, and 11 they've received operating permits from experience operating the plant. 12 Tennessee Environmental. The aerator tanks are pressurized 13 As I said, the controls are 13 vessels. I apologize for not getting the nameplate 14 microprocessor based. They are password protected, 14 data in the manual for those, but we'll add it. 15 so no unauthorized changes can be made. 15 The plant is divided into east and west 16 The remote boiler station -- or the 16 section, for lack of better terms, where the 17 monitoring station is located about 1300 feet from 17 800-horsepower boiler and the fire/water-tube boiler 18 the boiler house. It is staffed 24/7. The 18 are one DA type. The new 1500-horsepower and the 19 personnel in the remote station have been certified 500-horsepower fire tubes are all on new DA and a 20 by the state fire marshal's office for fire and 20 new search type. The search type feeds both sets of 21 safety. So these people are highly trained 21 deaerators. 22 individuals to monitor critical life safety, fire, 22 Typically, you have one boiler on 23 security. 23 standby on the old system, one boiler on the new 24 system is what we're working for. The boiler house, like I said, is about 25 1300 feet away. If you'll notice that Todd's 25 As far as training, Todd will be 1 physical address and the boiler building are the 1 responsible for the training and is responsible for 2 same. So someone is in the boiler house all the 2 enforcement to make sure that the training has been 3 time. Right now they function under the 20-minute 3 done. The people at the remote station will receive 4 rule. 4 four hours, two-hour refresher each year. I can't The purpose for this variance is not to 5 remember off the top of my head -- it's in the 6 reduce manpower or costs. It's basically to improve 6 manual -- for what the boiler operators get. 7 service to the students and faculty on campus. 7 ETSU is in the process of developing a 8 Currently, if there is an issue and a maintenance 8 training program. Todd and Dan can address that 9 person is not available, you know, the clients 9 better than I can. If you'd like them to address it 10 basically have to wait until someone can take care 10 now, they can. CHAIRMAN MORELOCK: Yeah. 11 of the problem; where with the variance, the boiler 11 12 operator could go take care of small problems. 12 MR. O'BRIEN: So we're working with the 13 The location of the boiler house and 13 site-specific vendor to develop our training. We 14 the layout in the boiler house is shown on Escape 1. 14 also have an online training system as well. Our 15 The layout of the panel is on Escape 3. It's set up 15 central station is basically our dispatch for our 16 one row of lights for each boiler. It's kind of a 16 fleets. 17 one-stop button for each boiler. 17 So these are trained individuals with 18 Typical operation for the boiler plant 18 two dispatchers at all times, 24/7. These folks are 19 trained in emergencies, mass notifications, fire, 19 is one boiler in operation, one boiler standby. The 20 two smaller boilers, the 500- and 800-horsepower, 20 medical. We have our own public safety officers as 21 are used during summer and light load to basically well. They're all considered state police officers. 22 match the system. 22 So certified dispatchers. The communication link between the 23 We are approved through the state fire 24 boiler room and the remote monitoring station will 24 marshal's office as a central station because we are

25 be the Johnson Controls energy management system.

25 handling all the fire alarms. It's the central

Page 54 Page 56 1 station for all the fire alarm monitoring for over 1 to discuss this item? 2 80 facilities. 2 MR. FOX: I'll make the motion. MR. HUDGINS: In Appendix C, there's a 3 CHAIRMAN MORELOCK: Second? 4 list of faults that will generate annunciation at 4 MR. BAUGHMAN: Second. 5 the remote station. We understand that a lot of 5 CHAIRMAN MORELOCK: I'm opening the 6 those faults are minor. But to be able to do the 6 floor for any questions or comments. 7 remote annunciation, we have to live with the Newson 7 MR. BAUGHMAN: Conflict? 8 strips, and the university is willing to accept 8 CHAIRMAN MORELOCK: And is there any 9 those Newson strips. 9 board conflicts for this item? 10 MR. O'BRIEN: And you would have the 10 Go ahead. 11 check -- you would have the faults that would be 11 DR. HARGROVE: Question, if you don't 12 created at the start of the shift with a new boiler 12 mind, when there is an increase in the steam load --13 operator, boiler attendant, with public safety, with 13 I think you mentioned that may occur during the 14 radio communication. And we also have backup 14 summer. 15 communication. We have land lines, and, of course, 15 MR. HUDGINS: Decreased steam load 16 they have personal cell phones as well. 16 during the summer. 17 17 That will be checked. And, of course, DR. HARGROVE: Yeah. 18 at any time, if they needed to leave, then there 18 MR. HUDGINS: They'll have 500 -- right 19 would be communications that they're leaving and, of 19 now they're running the 500-horsepower boiler to 20 course, when they return to our central station. 20 take care of the low load during the summer. 21 CHAIRMAN MORELOCK: Well -- and I'll 21 DR. HARGROVE: So my question is, if 22 interrupt you for just a minute too. Just so you 22 there is an increase, how does that change your 23 know, when the state comes in for their site visit, personnel requirements or shift requirements for 24 they'll look at your Appendix B fault code list. 24 your staff? 25 And any of those are free game for them to say, I 25 MR. HUDGINS: None. Page 55 1 want you to initiate that fault code, okay. DR. HARGROVE: None at all even with 1 So if it's a real one, by all means, we 2 the addition of the smaller boilers? MR. ELROD: Correct. 3 want it out there. 4 MR. O'BRIEN: It's currently manned 4 Continue. MR. HUDGINS: Currently, they're -- the 5 24/7. There will be no staff reduction or anything 6 boiler house is all on 12-hour shifts. At the start 6 of that nature. It really just gives us the ability 7 of the shift, as Dan mentioned, the boiler operator 7 to respond to an overflowing commode or -- I mean, 8 would come in, generate a fault, wait for 8 it's -- it will help us with property damage and 9 confirmation from the central station that they have 9 then also help us with customer service for our 10 received the fault. 10 students, faculty, and staff. I mean, we still have staff on second If for some reason they don't, they 11 12 realize that the variance is not in effect, so they 12 and third shift, but, you know, they're generally at 13 have to operate under the 20-minute rule until the 13 the housing facilities. So anything that happens in 14 communications are restored. 14 any of our administrative buildings, they could 15 This variance is a little different 15 respond and kind of minimize damages if you will. 16 from some in that the security guards, janitorial There will be other folks that will 16 17 services are not monitoring the boilers. They are 17 actually come in at that point to clean up or 18 monitored by boiler mechanics. So when it comes to 18 mitigate any issue. 19 restarting the boiler, the people in the boiler 19 DR. HARGROVE: Is that mechanic also 20 house are qualified to restart it. 20 available? I saw there's a boiler mechanic. Is So the boiler attendant in this manual 21 21 that individual also available? 22 can restart it. There's not a first-tier, 22 MR. O'BRIEN: So we currently have --23 yes, they're on call. 23 second-tier type boiler attendant. They're all 24 qualified operators. 24 DR. HARGROVE: On call. 25 25 CHAIRMAN MORELOCK: Do I have a motion MR. O'BRIEN: If it's not an operator,

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 1 they have a call list, which also includes Todd all
                                                                         MR. FOX: You're on a total Fireye
 2 the way up to me. So, yes, there's a process --
                                                         2 system with the exception of the Coen system.
                                                                         MR. HUDGINS: That's correct. That's a
 3 that's how we handle things right now, we have call
                                                         3
 4 lists.
                                                          4 mistake on my part, and I apologize.
                                                                         MR. FOX: Also under Appendix A, again,
                Our central station actually has all of
                                                         5
 6 our emergency numbers. We maintain call lists.
                                                         6 we have the Cleaver Boiler No. 1, that's a dual fuel
 7 They know who to call in the event of an emergency,
                                                         7 boiler.
 8 any sort of issues with facilities.
                                                         8
                                                                         MR. HUDGINS: They're all dual fuel
9
                DR. HARGROVE: Okay.
                                                         9 boilers.
                CHAIRMAN MORELOCK: Any other
10
                                                        10
                                                                         MR. FOX: That's not carried out
11 questions?
                                                         11 throughout --
                                                                         MR. HUDGINS: I'll carry that out.
                MR. FOX: Yeah. Under your Appendix A,
                                                        12
13 which has all your boilers listed, I'm looking at
                                                        13
                                                                         MR. FOX: -- the appendix.
14 Boiler No. 1 in Cleaver-Brooks, the national board
                                                                         MR. BAUGHMAN: I'll follow up with that
                                                        14
15 number has been left off.
                                                        15 same a little bit.
16
                MR. HUDGINS: That is correct.
                                                        16
                                                                         Under Boiler No. 1, it shows a maximum
17 We've -- a couple weeks ago, they located the
                                                        17 input of 33,600. It shows a maximum output of
18 national board number on the boiler. Mr. Chapman
                                                        18 75,000. I'd love to be selling those boilers.
19 provided us with the national board number. We
                                                         19
                                                                         MR. HUDGINS: Me and you. I'd like to
20 thought we were going to have to obtain a duplicate,
                                                        20 be specifying them.
21 but the number was found on the boiler.
                                                         21
                                                                         We wouldn't be here today, would we?
22
                MR. FOX: Oh, okay.
                                                         22
                                                                         MR. BAUGHMAN: No, sir.
23
                MR. HUDGINS: I'll get -- that will be
                                                        23
                                                                         MR. HUDGINS: I don't have to -- I
24 one of the corrections that we make.
                                                         24 can't answer that, what the actual is off the top of
                MR. FOX: That needs to be in there.
                                                         25 my head, but --
                Also, when we get down to the bottom
                                                                         MR. BAUGHMAN: To extend a bit on
                                                         1
 2 where it says Remarks, and you've got the
                                                         2 Mr. Fox's conversation about the bottom on the
 3 Fireye E110, you've got the Coen burn control
                                                         3 controls, so we've got a Fireye on Boiler No. 1,
                                                         4 Boiler No. 3, and Boiler No. 4. We have no
 4 system, the two superiors you have listed with the
 5 Fireye PPC6000s, where does the Honeywell that
                                                         5 Honeywell.
 6 you're using come into play?
                                                                         MR. HUDGINS: We have no Honeywell.
                                                         6
                                                         7 I'll take that out of the --
                MR. HUDGINS: I think that is a mistake
                                                                         MR. BAUGHMAN: But on Boiler No. 2, we
 8 on my part. They are the PC600 [sic]. For some
                                                         8
 9 reason, I thought they were Honeywell, but they are
                                                         9 have Coen with a CompuNOx Benz control system.
10 Fireye.
                                                         10
                                                                         MR. HUDGINS: That is per --
                MR. FOX: Where is the Honeywell that
                                                                         MR. BAUGHMAN: There's no equipment
                                                         11
12 you have --
                                                        12 description, annunciation, anything in the manual
13
                MR. HUDGINS: That's a mistake on my
                                                        13 referring to that control or system or annunciation.
14 part --
                                                                         MR. HUDGINS: Correct -- no. John
15
                MR. FOX: -- listed in here?
                                                        15 Frick, Bob Coen, and some of the information was
16
                MR. HUDGINS: You're talking about on
                                                         16 not -- I was not able to obtain the faults and the
17 the --
                                                         17 information for the Coen burner as I was able to for
18
                MR. FOX: I want to know which boiler
                                                        18 the boilers.
19 operates with Honeywell controls. That's what I
                                                        19
                                                                         I'll make another attempt to see if I
                                                         20 can get that information for that system.
20 want to know.
21
                MR. HUDGINS: There's not. The 7800 is
                                                        21
                                                                         MR. BAUGHMAN: Well, according to our
22 the Honeywell.
                                                         22 variance, it's required.
23
                MR. FOX: Yes.
                                                         23
                                                                         MR. HUDGINS: Okay.
24
                MR. HUDGINS: That should be stricken
                                                         24
                                                                         MR. BAUGHMAN: It has to be in here in
25 out. The Fireye is the PPC --
                                                         25 order for us to be able to confidently analyze and
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Page 64 Page 62 1 it. We might further that information down the road 1 vote. And there's no information at all to be able 2 to look at. 2 externally just to talk about cyber security. So Boiler No. 1, Boiler No. 3, and MR. ELROD: So the control interface is 4 Boiler No. 4 has got some information according to 4 just an interface. It's a read only; it's not a 5 the Fireye faults. And the Fireye faults are for 5 write. From my house, I can't change any set 6 the E110, which is on Boiler No. 1. The Fireye 6 points. No one can change any set points remotely. 7 PPC6000 is not in here either. 7 MR. BAUGHMAN: Nor can you set MR. HUDGINS: I was told that the 6000 8 remotely. 9 and the 110 faults are the same. 9 MR. ELROD: Right. You have to be MR. BAUGHMAN: That's -- and I 10 10 standing at the panel, put in the proper password 11 for you to change a setting. 11 appreciate that. We just don't have that. MR. HUDGINS: It needs to be MR. BAUGHMAN: So when the person calls 13 documented? 13 in to the guard station for their fault check to 14 verify that the boiler is faulting out, do they use 14 MR. BAUGHMAN: Yes, because it is two 15 the same fault every time? 15 separate control systems. 16 MR. HUDGINS: Okay. 16 MR. O'BRIEN: So we don't have that 17 MR. BAUGHMAN: So the only control 17 piece yet. We're developing that piece. But like 18 system we have in here is actually just the fault 18 was mentioned, we could use any of the faults if 19 codes. We don't have any other description of the 19 that -- I mean, I made a note that we need to make 20 programmer other than the fault codes. 20 sure that they can create any of the faults. So if 21 MR. HUDGINS: Okay. 21 we need to put it in the procedures that you do more MR. BAUGHMAN: That in itself doesn't 22 than one fault, you -- you have to change that up, 23 allow us to give a good analyzation. 23 however the case may be. So the other is -- back to the 24 I mean, it's also a monitored system. 25 communications accessibility, you mentioned that 25 We also know when it's offline as well as part of 1 our -- it's called Metasys is what we use through 1 they're not allowed -- they have access to remotely 2 look at what's going on with the boiler, with the 2 Johnson Controls. 3 programmer, and they're not allowed to make any MR. BAUGHMAN: What I was looking at, I 4 was just kind of getting in my mind of the person 4 changes. MR. ELROD: Correct. 5 coming in and checking the boiler. One of the best MR. BAUGHMAN: Not allowed and not 6 faults, of course, is low water, to test the boiler 7 capable are two different things. 7 on -- doing a positive check of the low-water MR. ELROD: Password protected and only 8 cutoff. 9 the service technicians have the password. 9 What I was looking at was just for MR. BAUGHMAN: So no possibility at all 10 10 information purposes more than anything, the thought 11 that these things could ever be hacked? 11 process of changing up those faults, because it 12 MR. ELROD: No -- well --12 gives that much more accountability to the safety of 13 MR. BAUGHMAN: Okay. 13 the -- the devices themselves. MR. O'BRIEN: We do at the university CHAIRMAN MORELOCK: Well, that's 15 have a whole IT security department that works on 15 information. It's not a requirement. You do have 16 firewall issues. This is all part of that system on 16 to check it, but we're not going to tell you how to 17 the service side at ETSU. 17 check it. That was just to clarify that. 18 MR. BAUGHMAN: Super. 18 What other questions? 19 MR. O'BRIEN: I hear what you're 19 MR. HENRY: I have one. 20 saying. You can't ever say never with that. But 20 CHAIRMAN MORELOCK: Go ahead. 21 that is -- the whole cyber security is actually --21 MR. HENRY: It's a clarification. Turn 22 they've really stepped it up at ETSU. It's a big 22 to Page 6 on your -- the handout you prepared. 23 deal not just for us. 23 Referring to the emergency duties. 24 MR. BAUGHMAN: Some other universities 24 In Item 1, 2, and 4, the language used 25 that I'm aware of are very involved with that end of 25 is mandatory. Item 3 is you "should" instead of

Page 66 Page 68 1 "shall" in that case. MR. BAUGHMAN: Yes. Under job 1 2 Explain that. Is there a reason for 2 description, Appendix G, at the bottom, the boiler 3 that, or is that just a typo? 3 mechanic, is that under employment of ETSU? MR. O'BRIEN: It's a typo. 4 MR. HUDGINS: Yes. 5 MR. HENRY: Okay. 5 MR. BAUGHMAN: And they have the CHAIRMAN MORELOCK: I just have a 6 qualifications? You have the required R-stamps? 7 couple comments as far as the Appendix A boiler data 7 MR. ELROD: No. 8 MR. BAUGHMAN: Well, under the job 8 sheet. You have some revisions to do. MR. HUDGINS: That's correct. 9 description, it says, Boiler mechanic replaces CHAIRMAN MORELOCK: On Boiler No. 1, 10 10 damaged boiler tubes and plates, repairs or replaces 11 the serial number is not correct if you compare it 11 high pressure piping. 12 to the picture of the nameplate you provided, 12 But the part that kind of raises the 13 which -- nice touch by the way, nice to see those 13 red flag to myself is they replace damaged boiler 14 nameplates. Make sure you get your boiler sheet 14 tubes and plates, which under the state of Tennessee 15 updated correctly. 15 requires an R-stamp. 16 MR. HUDGINS: Okay. 16 MR. ELROD: We don't have that. We 17 CHAIRMAN MORELOCK: Appendix G, your 17 don't do that. We do it by outside contractor. 18 job descriptions are fine. MR. BAUGHMAN: Then the job description 19 I just want to say that anytime you 19 will need to be revised. 20 20 have a specific name listed in this manual as MR. O'BRIEN: Basically eliminate the 21 opposed to a job title, that is your choice and 21 plates and the -- okay. 22 discretion to do that. But just know as your 22 MR. BAUGHMAN: Again, under where it 23 personnel changes that would require a revision to 23 says, Inspects and repairs boiler fittings such as 24 your manual, so just food for thought on that. 24 safety valves, they would not meet the requirement 25 In Appendix G, the only job description 25 of repairing a safety valve. Page 67 1 I could not find was for the public safety CHAIRMAN MORELOCK: Any other questions 1 2 department. You've got them for the other jobs, but 2 or comments? 3 you don't have your remote monitor job requirements Hearing none, do I have a motion for 4 listed. 4 this item? Then this has nothing to do with your 5 MR. BAUGHMAN: I'd just like to bring 6 variance. But as far as making boiler repairs, is 6 up before we make the motion that I feel like we 7 that being done per NBIC? Is it R-stamp repairs 7 don't have all the information in here that's needed 8 or --8 presently under the equipment description 9 MR. HUDGINS: Yes. 9 requirement to be able to make a vote. 10 CHAIRMAN MORELOCK: That's all the 10 CHAIRMAN MORELOCK: Okay. MR. BAUGHMAN: It's required that we 11 questions I had. 11 12 MR. BOWERS: Just a note on your 12 have an equipment description; it's listed in our 13 proposal, you mentioned the wrong paragraph on your 13 itemization. And for myself, speaking for myself, 14 fire boiler variance. 14 that it's lacking that part of the requirement. 15 CHAIRMAN MORELOCK: Yeah. 15 So if there wants to be any more 16 MR. BOWERS: Did you mention that? 16 discussion on that --CHAIRMAN MORELOCK: No, but you're 17 MR. FOX: It's lacking not only on the 18 right. What you saw was an older revision of the 18 information we have on the boilers itself but on the 19 rules. It used to be the old 20-minute rule; now control systems. 19 20 it's the new -- the Rule 22 is now Rule 11. So 20 CHAIRMAN MORELOCK: Okay. 21 you'll have to change it to 0800-03-03.08(11). 21 MR. FOX: I need to see something on 22 MR. HUDGINS: 08(11)? 22 that Coen system. You need to eliminate the CHAIRMAN MORELOCK: Yeah. We revised 23 Honeywell that you have in there since it's all 24 the rules in 2016, so... 24 Fireye. And I need to see something on the Fireye 25 Any other questions or comments? 25 system itself.

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                                                          1 old Coen burner and then resubmit that to
                Even though you're telling me that the
 2 E -- what is it, the E100 is equivalent to the 6000,
                                                          2 Mr. Chapman as part of the --
 3 I need to see something on that.
                                                          3
                                                                         CHAIRMAN MORELOCK: Well, would this
                MR. HUDGINS: So break them out into
                                                          4 create ETSU a problem to wait and vote on this in
 5 separate --
                                                          5 December, give you time to get the manual cleaned
                MR. FOX: Yeah, that's what I need.
                                                          6 up? Is that acceptable?
                CHAIRMAN MORELOCK: So if ETSU provides
                                                          7
                                                                         MR. O'BRIEN: I believe so, yes.
                                                          8
 8 the board with a revised manual that reviews
                                                                         CHAIRMAN MORELOCK: If that's
 9 clean -- cleaner, we can see putting it before the
                                                          9 acceptable, then we will capture these comments,
10 board once we have a complete manual, correct?
                                                         10 we'll table the item until December, you'll have
11
                MR. BAUGHMAN: Correct.
                                                         11 opportunity to send a revised manual to the state,
                CHAIRMAN MORELOCK: Gentlemen, are you
                                                         12 and they'll get it to us 45 days in advance of the
13 okay with that, to go back and revise this manual
                                                         13 December meeting, and then we can meet again in
                                                         14 December and hopefully have a review that will get
14 based on the comments you've received today and add
15 the missing information and bring it back in
                                                         15 you a site visit and approved variance, if that's
16 December?
                                                         16 acceptable to you gentlemen.
17
                                                         17
                                                                         MR. HUDGINS: Okay.
                MR. HUDGINS: I guess my only concern
18 is the information for the Coen burner.
                                                                         MR. BAILEY: Mr. Chairman, I think you
                                                         18
19
                MR. BAUGHMAN: Inasmuch as being able
                                                         19
                                                            might need to do that with a motion on the table.
20 to obtain the information?
                                                         20
                                                                         CHAIRMAN MORELOCK: Do I have a motion
21
                MR. HUDGINS: Yes.
                                                         21 to that effect?
                MR. BAUGHMAN: That's a good point. If
                                                         22
                                                                         MR. BAUGHMAN: So moved.
23 it's not able to be obtained, we don't have anything
                                                         23
                                                                         DR. HARGROVE: Second.
24 to be able to look at; nor would an inspector have
                                                         24
                                                                         CHAIRMAN MORELOCK: Any other
25 anything to look at. So they wouldn't be able to
                                                         25 discussion?
 1 perform their duties competently. So one way or
                                                                         All in favor of tabling this item until
                                                          1
 2 another, that information has got to be obtained in
                                                          2 the December meeting say aye.
                                                          3
 3 my perception of it.
                                                                         In Unison: Aye.
                CHAIRMAN MORELOCK: So the issue that
                                                                         CHAIRMAN MORELOCK: Opposed?
                                                          4
 5 we're trying to balance here is, is there enough
                                                          5 Abstentions, not voting? We'll table this item
                                                          6 until December.
 6 information missing that it would not pass a vote
                                                         7
 7 for a contingent approval today, let them get the
                                                                         With that item, that takes us to --
 8 information to the state that's missing, send it to
                                                         8 there is no discussion items. There's no board
 9 the board members, and handle it that way; or do
                                                         9 cases or interpretations.
10 they need to come back in December with a revised
                                                                         MS. JEFFERSON: I have one
                                                         10
11 manual?
                                                         11 acknowledgment.
12
                That's where we're at.
                                                         12
                                                                         Do y'all want to do that now?
13
                MR. BAUGHMAN: Because if it
                                                         13
                                                                         CHAIRMAN MORELOCK: Here is what I want
14 annunciates out and they don't have a fault code,
                                                         14 to do. Y'all have been patient for 2 hours. Let's
15 even within your own personnel, there's no reference
                                                        15 take a 15-minute break. Let me look at my phone
16 for that Coen system. So it's got to be obtained
                                                         16 this time. Let's reconvene at 10:45, and then we'll
17 along with just the other Fireye, which is current
                                                         17 finish our agenda.
18 manufacturer.
                                                         18
                                                                          (Recess observed.)
19
                MR. HUDGINS: Yeah, it is current
                                                                         CHAIRMAN MORELOCK: We have some
                                                         19
20 manufacturer.
                                                         20 acknowledgments.
21
                Would that be okay, as the chairman
                                                         21
                                                                         MS. JEFFERSON: The person that I
22 suggested, that -- that I provide a better section
                                                         22 wanted to acknowledge doesn't appear to be in the
23 for the -- the boiler controls, break it out into
                                                         23 room. However, I'd like to acknowledge Sam, Chris,
24 two parts for the Fireye systems, and then go back
                                                         24 as well as Deborah Rhone for the job that they've
25 and see if I can't find that old information for the
                                                         25 done with the training conference. In addition to
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Page 76 Page 74 1 the regular duties that we have to continue, they 1 for 23 years. 2 were able to spend a large amount of time actually 2 DR. HARGROVE: Well, good morning. 3 doing everything that they needed to do in order to 3 Keith Hargrove. I actually serve as dean of the 4 make this a phenomenal event. 4 college of engineering at Tennessee State So I'm very appreciative. I wish 5 University. I'm a former employee of 6 Deborah was here so we could acknowledge her. When 6 General Electric. Shop floor guy, manufacturing 7 y'all see her, just let her know that she is engineer for a number of years and decided to do 8 acknowledged. I guess all of her efforts are 8 this academia thing and share that knowledge. 9 totally appreciated. We really appreciate 9 I'm glad to be on this outstanding 10 everything she's done to coordinate this along with 10 board and provide a perspective with regard to some 11 her staff. 11 IT issues and also maybe some technical issues as 12 DR. HARGROVE: Hear, hear. 12 well. 13 CHAIRMAN MORELOCK: Are there any other 13 CHAIRMAN MORELOCK: My name is 14 acknowledgments or announcements from the boiler 14 Brian Morelock. I've been with Eastman Chemical 15 unit? 15 Company, it will be 30 years in December. I'm very 16 MR. CHAPMAN: Just some of my new 16 thankful for Eastman for what they've allowed me to 17 inspectors, which is Chris O'Guin, Michael Ryan -do and serve. I'm a mechanical engineer. 18 excuse me, he's up in Ohio. Michael Gafford, could I -- what I bring to this table is I'm you hold your hand up? 19 the member who represents unfired pressure vessels 20 20 in the state of Tennessee. So 24 years of my In Unison: He's outside. MR. CHAPMAN: Justin Simpson and 21 33 years of experience has been with pressure 22 Mark Neumann. equipment. I serve on ASME code committees as well 23 23 as National Board Inspection Code. I'm a That's the new commission. CHAIRMAN MORELOCK: Congratulations. 24 professional engineer. I'm a commission inspector 25 That's a pretty good test. I've taken it myself. 25 with the national board and hold a special inspector Page 77 1 commission in the state of Tennessee. MR. BAUGHMAN: Do you know what area 2 they'll be covering? I just am very thankful for the MR. CHAPMAN: Chris O'Guin is 3 opportunity to meet and work with y'all and really 4 Middle Tennessee. Justin Simpson and Mark Neumann 4 enjoy what I do. 5 is East Tennessee. And Mike Gafford is West 5 MR. BAUGHMAN: Well, I'm Dave Baughman 6 Tennessee. We're still trying to get one more, 6 out of --7 THE WITNESS: Follow that. 7 though. Then we'll be fully staffed. CHAIRMAN MORELOCK: I want to 8 MR. BAUGHMAN: Yeah, gee. 9 acknowledge the fact we have all of our board 9 CHAIRMAN MORELOCK: Yeah, right. 10 members here today, and thankful for their selfless MR. BAUGHMAN: I'm Dave Baughman out of 10 11 service and dedication to public safety with our 11 Murfreesboro, Tennessee. I've served on the board 12 areas of expertise. 12 now a handful of years. I don't exactly remember 13 With that said, it's been 11 years 13 when I came on, but I'm thankful to be a part of 14 since we've done this, but I just wanted to take a 15 few minutes at the end of this meeting to let our --15 I came on with my dad in the boiler 16 most of -- most of our board members are new. I'm 16 business in 1977, so I've been in the boiler 17 the only old one. I'd like you to take just a 17 industry now just over 40 years. That was 18 minute or two and talk about your area of expertise 18 September 15 of '77 is when I started with Dad, who 19 and how you -- where you serve and work and what you 19 came out of World War II, B-24 bomber veteran, very 20 bring to the board. It's nothing real formal, but 20 disciplined, in the box, no-nonsense kind of guy. I 21 just go ahead, Harold. 21 was about 180 degrees off center from that. I'd say MR. BOWERS: My name is Harold Bowers. 22 he fired me 100 times. He hired me 101. He was 23 I've been with the factory, FM Global, for 18 years 23 definitely a man that let you make your own 24 as an inspector. Before that, I was a plant 24 mistakes. 25 engineer at Pasminco Zinc in Clarksville, Tennessee, 25 I took the business over in 1984 when

Page 78 Page 80 1 he passed away. And one of the things that he had But I really focused on control 2 talked to me about was not so much being another 2 systems. That's what I spent most of my time with 3 welder, plumber, pipe fitter, electrician, but he 3 was on controls. I actually worked with Cleaver 4 said, If you'll study combustion and controls, 4 some, Cleaver-Brooks some on some -- building some 5 you'll always be able to keep a roof over your head. 5 of their controls. 6 It doesn't matter if you work for me or for someone 6 Combustion and controls are my thing. 7 else, you study for combustion and controls, and 7 I've been in -- by the time I was ten years old and 8 you'll always be able to feed your family. 8 could ride around with my dad, I had been in every And I did. And he explained it to me 9 boiler room that would let me in in the state of 10 in ways that I could understand. He said, There's 10 Tennessee because he did boiler service. 11 no real franchises in our boiler industry. We're 11 So I rode with him, and that got me 12 all mom-and-pop shops. He said at some point in 12 interested and everything. But I go in so many 13 time -- and these guys came in out of World War II. boiler rooms today and different things, and I see 14 Most of them were BTs out of the Navy. They came safety issues; I see control issues; I see things 15 out of the war, started up their boiler companies. that need to be addressed. Safety is my main thing. 15 16 They were going to do one or two things relatively 16 I'm glad I'm here. Over times I've 17 soon. They were going to retire, or they were going done stuff in the field, start-ups and stuff, you 17 18 to die. There was no new influx of new people 18 know, what we call a self-cleaning stack incident, 19 coming into the industry because the Navy was which is actually a little fire explosion. We've 20 done that and experienced that. I had Dave with me 20 getting out of having BTs, grouping that all under a 21 different grouping of machinist mates. 21 on one of those. And it came to be that's just where 22 Anyway, the safety factor is what I'm 23 we're at. This expertise gap is just getting wider 23 here for. Anything I can bring to the board, that's 24 and wider. So now you find yourself being involved 24 what I want to do. 25 with that expertise of lending it to a boiler rules 25 MR. BAUGHMAN: I'll expand on that just 1 board, different safety committees, subcommittees 1 a little bit. Back when Terry and I were first 2 within different industries, the chicken industry, 2 getting to know each other, I always -- we just 3 the brewery distillery industry. 3 didn't like salespeople. Being boiler service guys, 4 we were boiler men. And sometimes the customer will It's amazing to see where things are 5 going to go, because in the next 10 to 15 years, a 5 call multiple companies to come out on a service 6 lot of this expertise is going to be retiring out. 6 call. We would argue on who was going to be at the 7 And looking at that lack of expertise coming back in 7 job, because if somebody pulled in first and you 8 means that it's important for us to be able to share 8 pulled in behind them, they were the ones going, and 9 this information with the industry. Terry and I would argue because we were both wanting 10 That's a little background on myself. 10 to get out of there. 11 And thankful to be with Allied Boiler. We're just a We developed a relationship pretty 12 mom-and-pop shop, but we're so blessed. So, yeah, a 12 quickly of knowing where each other stood at in the 13 little bit about myself. 13 industry. 14 MR. FOX: Are you through? 14 MR. HENRY: My name is Jeff Henry. I 15 MR. BAUGHMAN: I'm done. 15 think I'm going to trump y'all from the boiler 16 MR. FOX: My name is Terry Fox. I grew experience at least from the family standpoint. I 16 17 up in the boiler business. I've been dealing with 17 started with combustion back in the mid 1970s, so I 18 boilers for -- just like Dave, for 40 years now. 18 have a fair amount of experience myself. But my wife's grandfather worked for 19 Dave and I were competitors at times. He worked for 19 20 one company, and I worked for another. 20 Combustion Engineering. At a point, he was one of 21 Like I said, I grew up in this the welders who did the first welded pressure 22 business. I've done everything from mixing mud in a 22 vessel, which is an ASME landmark down in 23 wheelbarrow to pour boiler grates and stuff for coal 23 Chattanooga. That was back in 1934. When GE shut 24 burners to retubes to putting in tube sheet, half 24 down the facility down in Chattanooga, the old

25 Combustion Engineering facility, that's, what, a

25 tube sheets, just anything and everything.

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Page 82 1 year ago now, through my wife's family and through 2 us, we had more than 100 years' experience in the 3 boiler business over that time. My background is a metallurgical 5 engineer and welding engineer. Work very closely 6 both with and for Dr. Canonico for a number of years 7 at Combustion. Have been involved in the ASME Board 8 of Pressure Vessel Code. I was chairman of 9 Section 2 for 12 years. I'm a member of Section 1. 10 I've served on the Board of Pressure Vessel 11 Technology. 12 I'm pleased to be here and honored to 13 be a part of this group. I think as all of the 14 members have indicated, whatever we can do to 15 improve the safety of this equipment is sort of 16 thing I'd like to be involved in. 17 CHAIRMAN MORELOCK: Jeff, I have a 18 question, where is that first welded vessel today? 19 MR. HENRY: It is to many disgust 20 that's up in Windsor, Connecticut. It's a shame. 21 We've talked to the mayor of Chattanooga about 22 talking to GE. Talked to the corporate about 23 getting it back because it belonged to Chattanooga. CHAIRMAN MORELOCK: It's very 25 significant.

1 When I travel outside of the state as the former 2 chief inspector or in my current capacity of talking 3 to individuals, this board is respected above all. Continue with the great work, and I'm 5 very proud to be a part of this state and to work 6 with all you gentlemen. Thank you. 7 In Unison: Thank you. 8 MR. ROBINSON: Can I say something? 9 CHAIRMAN MORELOCK: Go ahead. MR. ROBINSON: I'm Eugene Robinson, 10 11 former assistant chief with the state of Tennessee. 12 Years ago I recall I started getting copies of the bulletin, CIBC, national board book that was sent 14 out every quarter. 15 I was inspired by the words of one of 16 the former directors, McDonald. He used to write 17 events that would occur, current events in the front 18 of this book. And he would close every sentence with the word whew, W-H-E-W, whew, meaning he had 20 labored himself to point out things of safety that 21 was pertinent to the industry. 22 I learned to respect those writings 23 from all the detailed statistics that he had shown 24 us. And over the years -- I can even recall when 25 Don Tanner, whom I almost fell out of my chair when

Page 83 MS. JEFFERSON: I'd just like to thank 2 all of you because y'all bring a vast amount of 3 experience, number of years as well as diversity to 4 the board. That, in turn, helps the department, it 5 helps the division, as well as the unit. We 6 couldn't do what we do without y'all. We don't take 7 it lightly by any means. We appreciate what y'all 8 do for us. We also appreciate the fact that you 10 volunteer your services. You volunteer your 11 efforts, your time, your resources and everything 12 else. 13 I just want you to know that you are 14 truly appreciated, so thank you. 15 In Unison: Thank you. 16 MR. TOTH: Can I say something? 17 CHAIRMAN MORELOCK: Go ahead. 18 MR. TOTH: I just want to say from the 19 audience side of the table, I've been involved with 20 the state of Tennessee boiler inspection division in 21 and out for 25 years. When I came on, there was a 22 number of distinguished individuals on this board. And I look today, and I see the same 24 type of individuals on this board. You have a 25 plethora of knowledge. And it is so important.

1 he approached us over at another company I used to 2 work for in East Tennessee, and he walked in -- and 3 God be my witness -- he had all of this gold jewelry 4 on, and it scared me to death. And if you knew 5 Don Tanner, he could be that intimidating. He would 6 throw things. He would yell at you. He practically 7 would bite you. 8 My mentor and I tried to -- we were doing some things that -- we were a high tech 10 manufacturing operation, subsidiary of Cleaver-Brooks. And they were building things that were disallowed by ASME or subjective, not proven, ambiguous. And what we attempted to do was to 14 rewrite the ASME code to adopt our spirit of 15 manufacturing. 16 I know I'm rambling. Forgive me. 17 Mr. Tanner came in, and at that 18 particular time, he chewed up five cigars in front 19 of me. It scared the daylights out of me because we 20 had made the chief of Tennessee upset. The chief of Tennessee is an important person in this business. 22 The buck stops right there with the chief of 23 Tennessee in this business. 24 I was happy -- I am happy to be 25 privileged to have been a part of such a

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 1 distinguished group. Even Marty. Marty came in my
                                                          1 Eastman. Randall was getting me set up to go in.
 2 shop. Marty, I'm going to let this one out, and I'm
                                                          2 And he cleverly winched up the tripod loose so the
 3 going to sit down after this.
                                                          3 cable wasn't pulled tight, so when I went through
                Marty came in my shop after I invited
                                                          4 that man way, I had a little bit of free fall before
 5 him and some of his constituents, commissioners,
                                                          5 I took the slack out of that.
 6 dignitaries, he came in my shop and bit me.
                                                          6
                                                                         All I could hear was laughing. What am
                Do you remember that, Marty?
                                                          7
                                                            I going to do, right?
                                                          8
 8
                MR. TOTH: Yeah, I remember that.
                                                                         But all jokes aside, I couldn't -- I
                MR. ROBINSON: Marty was the acting
                                                          9 couldn't work for nicer folks. So please come and
10 chief, came into my shop, bit me and made me
                                                         10 hear their presentation. Their presentation is
11 approach the board and defend why we were doing some
                                                             going to cover some things about the significance of
12 high tech manufacturing techniques, right, Marty?
                                                         12 this relationship, and they'll talk more about that
13
                MR. TOTH: Amen.
                                                         13 as well. Please come on back and enjoy this
                MR. ROBINSON: I'm so happy. You guys
                                                         14 afternoon.
14
15 have got so much experience. I really -- I enjoy
                                                         15
                                                                         With that, I --
16 you guys. Keep us safe. Thank you.
                                                         16
                                                                         MR. BAUGHMAN: One second.
17
                CHAIRMAN MORELOCK: We're down to
                                                         17
                                                                         CHAIRMAN MORELOCK: Go ahead.
18 Item 10, which is our next Tennessee Board of Boiler
                                                         18
                                                                         MR. BAUGHMAN: I want to say, for one,
19 Rules meeting will be held at 9:00 a.m. on
                                                         19 this is a team effort. We all work as a team
20 Wednesday, December 12, right here at the Tennessee
                                                         20 together. This is a great team to work with. The
21 Department of Labor.
                                                         21 number of relationships that have been built beyond
                Before I adjourn, which is Item 11, I
                                                             working on boilers is fantastic, because we know
23 strongly encourage y'all to take this conference
                                                         23 this is what we do for a living, but it's not what's
24 time to talk to people that you don't know, meet
                                                         24 most important in our lives.
25 people that you haven't seen maybe in two years or
                                                         25
                                                                          To be able to expand upon those
 1 longer. We're so very thankful that the state of
                                                          1 relationships out in a boiler room is fantastic. I
 2 Tennessee has allowed us to continue this fall
                                                          2 really enjoy that with you guys. But knowing that
 3 conference and the importance of it.
                                                          3 we work hand in hand and what nobody brings to the
                                                          4 table in this equation is an ego, that makes working
                Please make yourself available for the
 5 presentations that are coming and you've already sat
                                                          5 on all this stuff fantastic.
   through for the knowledge transfer.
                                                          6
                                                                          And just so -- from my perspective and
                Dave was talking about the next
                                                          7 us working directly with y'all in this industry is
 8 generation.
                                                          8 that it's a great team. I appreciate you guys very
                Correy Menzel, stand up, Correy.
                                                          9
                                                             much.
                                                                         CHAIRMAN MORELOCK: All hearts and
10 There's the next generation right there.
                                                         10
                                                         11 minds cleared. All right. We're adjourned. Thank
11
                MR. BAUGHMAN: All right. Yeah.
12
                CHAIRMAN MORELOCK: Correy came onboard
                                                         12 y'all for coming.
13 back in June, so we're excited to have him on
                                                         13
                                                                          (Proceedings were adjourned at
14 materials, vessels, and piping team.
                                                         14 11:30 a.m.)
15
                So not to steal the thunder, but please
                                                         15
16 come back for the presentations this afternoon. As
                                                         16
17 you can tell, we have a lot of folks from Eastman
                                                         17
18 here. This is my work family. A lot of them are
                                                         18
19 still back home too in the vessel team. I can't say
                                                         19
20 enough about them.
                                                         20
21
                They've been through a lot of things
                                                         21
22 with me other than just work. I can't -- I can't
                                                         22
23 express how much I appreciate them.
                                                         23
24
                I will say that when I was young like
                                                         24
                                                         25
25 Correy, I went into a high pressure vessel at
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1	Page 90 REPORTER'S CERTIFICATE	
l	REPORTER 5 CERTIFICATE	
2		
3	I, Elisabeth A. Miller Lorenz, RMR,	
4	CRR, Notary Public and Court Reporter, do hereby	
5	certify that I recorded to the best of my skill and	
l	-	
6	ability by machine shorthand all the proceedings in	
7	the foregoing transcript, and that said transcript	
8	is a true, accurate, and complete transcript to the	
9	best of my ability.	
l		
10	I further certify that I am not an	
11	attorney or counsel of any of the parties, nor a	
12	relative or employee of any attorney or counsel	
13	connected with the action, nor financially	
14	interested in the action.	
15	SIGNED this 27th day of September,	
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16	2018.	
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19		
20	Plisabet AN Mento may	
l	Thisabeth / Mentoning	
21		
22	Elisabeth A. Miller Lorenz, RMR, CRR	
23	My Notary commission expires: 3/10/2019	
24	Tennessee LCR No. 66	
	Expires: 6/30/2020	
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